

REMARKS

In response to the final office action dated July 12, 2007, Applicants amended the specification and claims 1, 59, and 62-82. In particular, the previously pending claims include two claim 62. Applicants renumbered the second claim 62 to claim 63 and renumbered previously pending claims 63-82 to claims 64-83, respectively. Finally, Applicants added new claim 84. Claims 1-7, 9, 11, 13-29, 36-49, and 52-84 are presented for examination. To be consistent with the final office action, Applicants used previously pending claim numbers in the following discussion.

Initially, Applicants would like to thank the Examiner for the telephone interview with their counsel held on October 10, 2007. During the interview, Applicants' counsel proposed to replaced the term "having at least" recited in previously pending claims 1, 59, 63, and 80 with "consisting of." The Examiner agreed that this amendment would distinguish these claims, as well as their dependent claims, from Gross et al., WO 97/07153 ("Gross"). Further, Applicants' counsel argued that the previously pending claims are patentable over Hammond, U.S. Patent 5,646,217 ("Hammond") because Hammond does not disclose or suggest with sufficient specificity of the polymer blends covered by these claims. The Examiner agreed with Applicants' counsel's arguments, but would like to review Hammond and Applicants' written response to the final office action in more detail.

In the final office action, the Examiner rejected claims 1-7, 11, 13-21, 25, 36, 38, 39, 44, 45, 52-56, 59-69, 71-75, 77, 79, and 80 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over Gross.

As amended, previously pending claims 1-7, 11, 13-21, 25, 36, 38, 39, 44, 45, 52-56, 59-69, 71-75, 77, 79, and 80 cover blends including first and second PHAs, the second PHA containing only two comonomers. Gross describes a method of adding PEG to culture media of *Alcaligenes eutrophus* and *A. latus* to produce PHAs. See, e.g., the Abstract. As a result, the PHA blend obtained by this method contains PHAs having three or more comonomers, one of them being an EG monomer. See, e.g., Figure 1 and page 19, line 27 to page 20, line 16. Gross does not disclose or suggest a PHA that contains only two comonomers, as required by amended claims 1-7, 11, 13-21, 25, 36, 38, 39, 44, 45, 52-56, 59-69, 71-75, 77, 79, and 80. Thus, these

claims are not anticipated or rendered obvious by Gross. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

The Examiner rejected claims 1-7, 9, 11, 13-49, and 52-82 under 35 U.S.C. §103(a) as being obvious over Hammond.¹

As amended, previously pending claims 1-7, 9, 11, 13-49, and 52-81 cover blends including first and second PHAs. The first PHA includes 3-hydroxybutyrate. The second PHA includes a first comonomer and a second comonomer only. One of the first and second

comonomers is of formula (V):
$$\text{---O---}\overset{\overset{\text{R}^2}{|}}{\underset{\underset{\text{H}}{|}}{\text{C}}}\text{---}\overset{\overset{\text{H}}{|}}{\underset{\underset{\text{H}}{|}}{\text{C}}}\text{---}\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---}$$
, in which p is 2 or 3 and R² is H or C₁-C₆ alkyl. In other words, the second PHA copolymer includes a 4-hydroxycarboxylate or a 5-hydroxycarboxylate. In addition, the blend contains from about 25% by weight to about 49% by weight of the second PHA.

Hammond describes a polymer blend containing a first PHA, optionally a second PHA, and a transesterification catalyst. *See, e.g.,* the Abstract. The first and second PHAs can include units of formula (I): -O-C_mH_n-CO- (I), in which m is in the range 1-13 and n is 2m or (if m is at least 2) 2m-2. *See, e.g.,* column 1, lines 35-40. However, Hammond does not disclose or suggest, with sufficient specificity, a blend containing two PHAs, in which (1) the first PHA includes 3-hydroxybutyrate, (2) the second PHA includes a first comonomer and a second comonomer only, (3) the second PHA copolymer includes a 4-hydroxycarboxylate or a 5-hydroxycarboxylate, and (4) the blend contains from about 25% by weight to about 49% by weight of the second PHA, four limitations required by previously pending claims 1-7, 9, 11, 13-49, and 52-81. Thus, these claims are not obvious over Hammond.

Previously pending claim 82, as amended, covers blends including (1) a first PHA that includes 3-hydroxybutyrate and (2) a second PHA that includes poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate), in which (3) an amount of the first PHA in the blend is greater than an amount of the second PHA in the blend. Hammond does not disclose or

¹ Applicants cancelled previously pending claims 30-35 in the response filed on January 23, 2006, so the rejection of these claims should be withdrawn.

suggest, with sufficient specificity, a blend that meets all three limitations required by previously pending claim 82. Thus, this claim is also not obvious over Hammond.

Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

Applicant submits that the application is now in condition for allowance, which action is requested.

This response is being filed concurrently with a Request for Continued Examination (RCE) with the required RCE fee. The RCE fee and the Petition for Extension of Time fee are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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